U.S. Pacific Command

Experimentation
Activities
Key Results

Aug 06)

Experimentation Focus Areas

- Focused logistics – Joint Experimental Deployment System
- Effects operations and planning – TEBO ACTD
- Information operations and assurance
- Joint Fires
- Bandwidth monitoring and control
- Collaboration

Participants: USFK, USPACOM and assigned Components

Key Objectives / Warfighter Challenges

- Improve joint force projection
- Improve Info-sharing
- Find, track, defeat, and defend against adversary ballistic missile, cruise missile, and UAV capabilities
- Improve joint force management
- Information operations
- Adaptive adversary understanding
- Joint global deterrence
- Generating effects
- Assessment process
- Joint Transportation Interface

Key Findings:

- **Joint Experimental Deployment System (JxDS)**: Valuable insight into sub-Unified Commander's requirements, but not applicable for PACOM-wide use; limited acceptance of JxDS by USFK logistics personnel
- **Theater Effects Based Operations (TEBO)**: Excellent application of effects planning and assessment in USFK. TEBO software tools greatly facilitated access to ONA database. PACOM J85 is facilitating broader theater application
- **Joint Fires**: Use of JADOCS as primary tool for coordinating and deconflicting fires within USFK is now part of the community culture. Most sustainment and support issues are resolved.
- **Collaboration**: Especially at the logistics "seams" and among the supported and supporting roles

07)

Experimentation Focus Areas

- Effects based operations, planning and assessment
- Information operations and assurance
- Joint Fires
- Intelligence, Surveillance, and Reconnaissance (ISR) management
- Bandwidth monitoring and control
- Collaboration
- Web-centric operations
- Science and Technology community integration

Participants: USPACOM and assigned Components and forces; USSTRATCOM

Key Objectives / Warfighter Challenges

- ISR preparation and synchronization
- Improve joint force projection
- Improve Info-sharing
- Find, track, defeat, and defend against adversary ballistic missile, cruise missile, and UAV capabilities
- Improve joint force management
- Information operations
- Adaptive adversary understanding
- Joint global deterrence
- Generating effects
- Maritime domain awareness
- Strategic communications
- Assessment process

Key Findings:

- Joint Force Projection ACTD: Valuable insight into multiple deployment and distribution data sources via a single, web-based interface
- Information Operations (IO) Range: Proven training range capability that is value-added to IO planning and operations during exercises (and potentially real-world ops
- Science and Technology (S&T) Cell: Value-added concept for quickly identifying S&T solutions to operational needs and applying them near-term; institutionalize concept with a CONOPS
- TacSat-1 / Operationally Responsive Space: Value-added concept for providing the JTF with tactical space assets; Virtual Mission Operations Center (VMOC) management tool provides excellent situational awareness and C2
- Joint Mobile Network Operations (JMNO): Potential for significant improvement for Service-led network integration at JTFs via enhanced TTPs, but need focus on a lower-tier, tactical exercise
- Collaboration: Especially at the “seams” between geographic and global combatant commands in the supported and supporting roles; candidate for future concept

U.S. Pacific Command

Near Term Experimentation Activities

Addressing Commander USPACOM top priorities

COBRA GOLD 07 (1-15 May 07)

Experimentation Focus Areas

- Language Translation – Phraselators; Coalition chat instant messaging; Call-a-translator
- C4ISR – Coalition Secure Management and Operations System; Perimeter Security; Smart Data Flow
- Nonlethal capability – Vehicle Nonlethal Munitions; Dazzler; capability sets; Sound Commander; Vehicle Lightweight Arresting Device
- Geospatial logistics – Joint Modular Intermodal Distribution system; Global In-transit Visibility; Node Management and Deployable Depot

Key Objectives / Warfighter Challenges

- ISR preparation and synchronization
- Improved info sharing
- Collect and fuse multi-source data
- Coalition Information sharing
- Improve joint force projection
- Find, track, defeat, and defend against adversary ballistic missile, cruise missile, and UAV capabilities
- Improve joint force management
- Force protection
- Joint Transportation Interface

Participants:

MARFORPAC, III MEF and Components,, Thailand, Singapore, 12 observer nations

Expectations

- Assessment of multiple nonlethal capabilities and effects
- Concurrent implementation and assessment of multiple language translation methodologies
- Force protection
- Bandwidth management effectiveness
- Effective in-transit visibility

May/Jun 07)

Experimentation Focus

- Joint C2 for War on Terror Activities JT&E
- Joint and Combined fires – Joint Fires Coordination Measures JT&E; BAO Kits
- Persistent ISR - TacSat-2, small UAVs, see-through-structures technologies
- Maritime Domain Awareness – Underwater unmanned vehicles,Multi-INT Ship Tracking
- Multinational Inter-agency Group coordination
- Weather situational awareness - Cognitive Network for Atmospheric Sensing
- Logistics in-transit visibility – Joint Modular Intermodal Distribution System;Node Management and Deployable Depot; Coalition Movement Systm
- Rapid airfield construction
- Live-virtual-constructive training optimization
- GPS jamming
- 21 Australian experimental studies

Key Objectives / Warfighter Challenges

- ISR preparation and synchronization
- Persistent ISR
- Improved info sharing
- Collect and fuse multi-source data
- Interagency coordination and planning/operations in irregular warfare
- Precision airdrop
- Logistics tracking and visibility
- Coalition information sharing
- Entry operations lift
- Cross-domain solutions
- SOF C2
- Information operations

Areas:

Participants: USPACOM, C7F, Service Components, Australia Defence Force

Expectations

- Assessment of multiple small UAVs, tactical satellites, see-through-structure technologies, and other assets for persistent ISR
- Feasibility of submarines for use as C2 centers in forward SOF operations
- Use of standard TTPs for joint and combined fires operations
- Rapid airfield construction for landing of C-17s and at least three aircraft on ground
- Initial operation of Joint/Combined Training Capability and the Joint Training and Experimentation Network for joint and combined operations with Australia
- Analyze effects and countermeasures for GPS jamming
- Improved weather awareness and operational effectiveness
- Leverage Combined Enterprise Regional Information Exchange System (CENTRIXS) to enhance situational awareness and collaboration between US and Australian

07)

Experimentation Focus Areas

- Maritime Domain Awareness
- Integrated information operations training for implementing and assessing IO Range capabilities
- Collection of Service/DoD Science and Technology experts that support Tiers 1 and 2
- Use of TacSat for operationally responsive space
- GPS Jamming effectiveness and countering
- Maritime Interdiction, Kill Chain, JC2NEW, JIMI,

Key Objectives / Warfighter Challenges

- ISR preparation and synchronization
- Persistent ISR
- Improved info sharing
- Collect and fuse multi-source data
- Information operations
- ISR preparation and synchronization
- Improve joint force projection
- Find, track, defeat, and defend against adversary ballistic missile, cruise missile, and UAV capabilities
- Improve joint force management
- Information operations
- Maritime domain awareness

Participants:

USPACOM, PACFLT, Service Components

Expectations

- Assessment of tactical satellites for persistent ISR
- Ocean Glider unmanned underwater vehicle to collect ocean data
- Environmental acoustic recording system
- C2 of net-enabled weapons
- Stand-off SUW kill chain assessment
- Electronic warfare integrated reprogramming
- GPS jamming effectiveness and countering

Need JFCOM assistance with analysis and military utility assessments

Experimentation

Experimentation Focus

- FOAL EAGLE
- BALIKATAN
- ARDENT SENTRY
- PANDEMIC INFLUENZA
- Service Exercises
- Title X Events

How to Reach USPACOM Experimentation

http://www.hq.pacom.smil.mil/j8/j85

michael.solomon@pacom.mil

michael.solomon@pacom.smil.mil